

Corporate world of Union Carbide...

POLYARYLATES-A NEW FAMILY of high performance engineering plastics-will be introduced in the United States shortly. In an agreement with Unitika Ltd. of Japan, developer and manufacturer of the resins, Union Carbide will become Unitika's distributor of polyarylates under the trademark Ardel.

Polyarylates are aromatic polyesters containing bisphenol A and phthalic acids. The basic resin is a moldable, transparent, structural thermoplastic which exhibits excellent ultraviolet stability and has continuous-use temperature ranges exceeding those of polycarbonate. The Ardel polyarylates have good electrical properties and are resistant to a broad range of hostile environments. These properties and performance characteristics suggest wide-ranging, significant applications in transportation, solar heating and electrical markets.

Savings plan, retirement books

Corporate Benefit Plans has issued revised booklets for the Retirement Program and Savings Plan.

Nuclear Division employees will be receiving copies of the booklets this month.

The plans described in these booklets have not been changed, but new booklets are required by federal regulations.

When booklets are received, they should be inserted in your Benefit Plans binder.

COMPLETION IS SCHEDULED late this year for the eighth major expansion at the 13-year-old Molecular Sieve adsorbent manufacturing facilities in Mobile, Ala., by Union Carbide's Linde Division. The project includes expansion in the production capacity of adsorbent products. The high-quality Molecular Sieve zeolites manufactured at the plant are used in thousands of industrial and commercial systems for drying, purifying and separating many liquids and gases. The largest users of sieves are the natural gas, petrochemical and petroleum refining industries.

Claims less

Supplemental life insurance history

Premiums for the Supplemental Life Insurance are set at levels which will cover the expected claims. However, claims continue to be less than expected. Therefore, premiums will again be suspended for the first three months of the year.

Those who were participating in the Supplemental Plan on December 31, 1978, including early retirees and employees on leave-of-absence, will not have a monthly premium payment until April, 1979.

For hourly-paid employees, this means there will be no charge for the coverage during the first 13 weeks of 1979. For salaried employees, there will be no charge for the months of January, February and March.

Hospitalization coverage increased to defer costs

Effective January 1, 1979, the following charges are covered under the Basic Hospital and Surgical Plan for Oak Ridge employees. Negotiations are in progress with Kentucky officials and Paducah employees will be notified when the extended coverage is extended to them.

• **Preadmission Tests** - Charges for X-rays and laboratory tests and EKG's made at the hospital on an outpatient basis within seven days of the time patient is admitted for in-hospital surgery.

• **Second Surgical Opinion** - Charges related to a second opinion, when elective surgery (surgery that is not performed as an emergency) is recommended, including the specialist's fee and the usual and customary expense for any X-rays and laboratory tests required.

• **Extended Care Facility** (Skilled Nursing Facility as defined by Medicare)-Benefits will be provided when, upon the recommendation of a physician, you are admitted to a Skilled Nursing Facility for continued treatment of an illness or injury which required at least three days of hospitalization and you are admitted to a Skilled Nursing Facility within 14 days following discharge from the hospital and further hospitalization would otherwise be required. You will be entitled to semiprivate accommodations and other services (includes only those services which are ordinarily provided by hospitals to inpatients). Charges for these services are covered in a Skilled

Nursing Facility only. Nursing charges for custodial care in a Nursing Home are **not covered**.

Each day that benefits are provided for services rendered by any such facility will count as one-half day of hospitalization. The total number of days in Hospital and Extended Care Facility cannot exceed maximum number of allowable days of hospitalization.

• **Home Health Care** - Home Health Care benefits under a physician-approved plan of treatment when services are rendered through a licensed (in accordance with State law) Home Health Agency. Benefits will be provided only if hospitalization or confinement in a Skilled Nursing Facility (as defined by Medicare) would otherwise have been required.

Covered services include: part-time professional nursing; part-time Home Health Aide services; physical, occupational, or speech therapy; medical supplies, drugs, and medicines prescribed by a physician; and necessary laboratory services.

Please note, the Skilled Nursing Facility and Home Health Agency Benefits do not cover confinement in a Skilled Nursing Facility or services of a Home Health Agency for custodial care. If you anticipate using these new benefits, please contact your Benefit Plans Office for specific information.

These changes apply to expenses incurred on or after January 1, 1979. There will be no increase in premiums because of these changes. These benefits are intended to reduce the overall cost of basic health care by utilizing less expensive facilities and services based on the medical needs of the patient.

State of Laboratory set for January 23

ORNL Director Herman Postma will present the annual State of the Laboratory address at 8 p.m. Tuesday, January 23, in the auditorium of the American Museum of Science and Energy. The new "Images of ORNL," a multimedia slide presentation developed by the Laboratory's Photography Department, will be shown at 7:30.

Nuclear Division employees, their families and friends are cordially invited to attend the slide show, talk and social hour. Refreshments will be served following the presentation.

In this issue. . . .



For Wallace Tillery, a Nuclear Division retiree since 1973, sewing is a thrifty way to enjoy the leisure life: he makes much of his own and his wife's clothing, including sports coats and pants! But sewing is just one of many interests for Tillery, who "makes life a hobby." His story is on page 2.

Also in this issue:

- **Question Box** page 3
- **Children's parties set holiday mood** page 4
- **Promotions, new appointments told** pages 5,6
- **Y-12 has successful blood drive** page 7
- **Dr. Lincoln** page 7

Enjoying the leisure life. . .

Retirement life for Wallace N. Tillery is like a patchwork quilt. Each new hobby or interest forms one more square in the already colorful pattern. "That's because I make life a hobby," Tillery said, "Always have and always will."

Tillery spent most of his working years in creative disciplines, including his Nuclear Division job as a department head with photography at ORNL and Y-12.

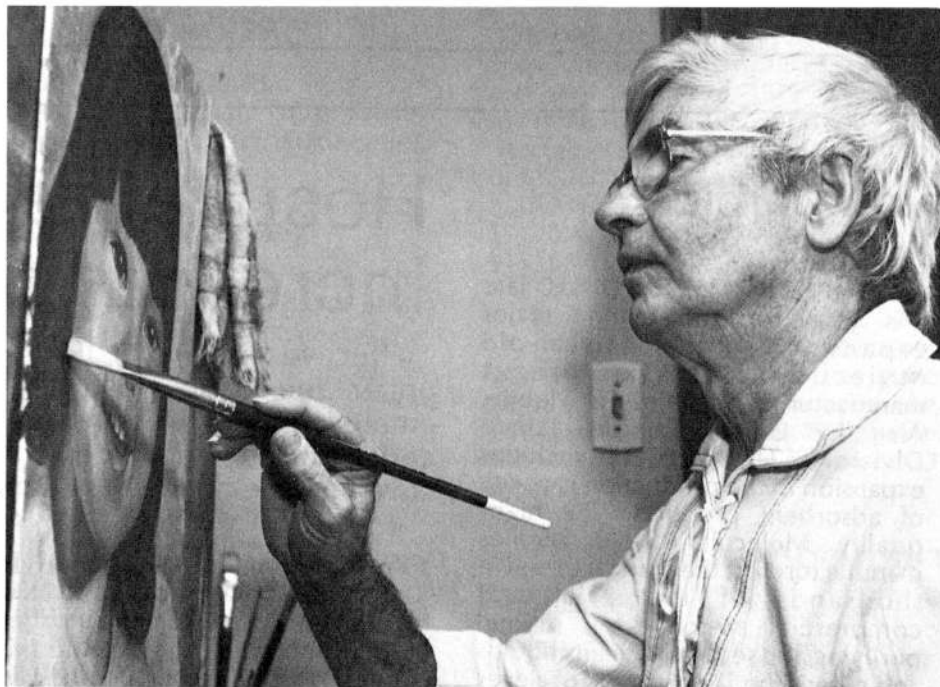
Retiring in 1973, he began to spend more time on his—up till then—part-time hobbies. "You have to have been busy all along," he said. "You can't expect to retire and then become active."

Some of Tillery's interests include cooking, painting, woodworking, sewing, gardening and making picture frames.

The white-haired retiree said he started cooking after retiring. "Frances, my wife, had made my breakfast every day for 25 years, so I decided to give her a break." Now they split the cooking responsibilities. Frances admits it is a nice change to have someone cook for her.

Painting is a hobby Tillery let slide for awhile, but has started again. He prepared a corner of the TV room for that purpose and has working space in the basement for framing the completed paintings.

A built-in television, a stereo console, a sewing machine table and an electric organ reworked to sound like a pipe organ are examples of



Tillery's patchwork of hobbies

Tillery's woodworking and mechanical abilities. "The part I don't like is the finishing," he admits.

The Tillerys also garden. "We don't buy any of our vegetables," he said, "and I start my own plants from seedlings in a greenhouse I built out back."

Perhaps Tillery's most unusual hobby is his sewing. "I'd some experience in pattern design and, aside from that, my wife spurred my interest in sewing." Mrs. Tillery is a petite dark-haired woman whom her husband said is "impossible" to fit in store-bought clothes. "I got tired of seeing her in the same ol' thing and

decided to do something about it."

Some of the custom-made clothes include his-'n-her plaid jackets, suede coats, pant suits and Tillery is currently making himself an overcoat.

For exercise the Tillerys walk a mile every day with their Chihuahua, Lady. They also attend exercise classes each week at the Oak Ridge Senior Citizens Center.

Tillery said he would like his next activity to "get my feet off the ground." He did aerial acrobatics before World War II and would like to update that interest by learning to hang glide.

Credit unions set annual meetings

The Annual ORNL Credit Union Meeting will be held February 1 at the Oak Ridge Civic Center, with registration beginning at 6:30 p.m., and the meeting starting at 7:30. The main order of business will be the election of three members to serve on the board of directors and two members to serve on the credit committee. To be eligible to vote, you must be an ORNL Credit Union member over 16 years of age.

The following slate of candidates has been nominated:

- **Board of directors**—Emily D. Copenhaver, Julian R. Gissel, Vivian A. Jacobs, Lynda R. Lewis, Charles D. Moak and Harley H. Ross.
- **Credit committee**—Peter P. Holz, John R. Jones Jr., Jeff S. Knisley and Frank F. Mary.

In addition, any voting member may nominate a candidate from the floor.

* * * *

The Y-12 Credit Union has set February 8 for its annual meeting. It will be held at 7 p.m. at the Oak Ridge Civic Center. To be elected are two members of the board of directors and three members of the credit committee.

Herb Gwinn, nominating committee chairman, has given the following slate:

- **Board of directors**—Tom Stephens, Billy Hicks.
- **Credit committee**—Mary Frances Bailey, Tom Wallace and Steve Redding.

* * * *

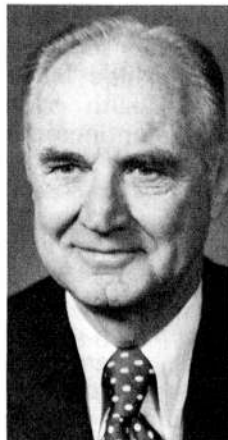
The K-25 Credit Union annual meeting is scheduled to be held on January 26 at the Oak Ridge Civic Center beginning at 7:30 p.m. Two board members and one credit committee member will be nominated at the meeting. V. O. Maggart Jr. will be retiring as president of the board of directors, a post he has held since 1964.

* * * *

The C-100 Plant Credit Union at Paducah has set their annual meeting at 1:30 p.m., Sunday, January 28. It will be held in the Paducah Civic Center.

next issue. . .

The next issue will be dated January 25. The deadline is January 17.



Robert E. Cassell
ORGDP Operations
34 years service



Kenneth H. Cox
ORGDP Maintenance
32 years service



Raphael A. Dandl
Fusion Energy, ORNL
29 years service



Robert H. Davidson
ORGDP Operations
42 years service



William D. Gooch
Purchasing
33 years service



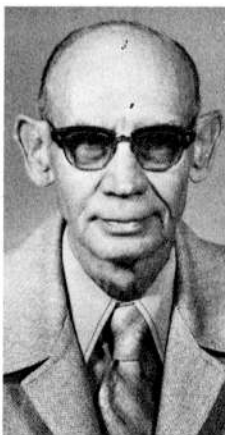
Joe C. Reeves
ORGDP Maintenance
34 years service



Harry E. Hallwas
ORGDP Maintenance
34 years service



Robert B. Splittgerber
ORNL, Instrumentation
and Controls
30 years service



Buford A. Taylor
ORGDP Operations
34 years service



James C. Clark
Plant Services
Paducah
26 years service

safety scoreboard

Time worked without a lost-time accident through January 4:

Paducah	146 Days	1,828,000 Employee-Hours
ORGDP	23 Days	691,200 Employee-Hours
Y-12 Plant	266 Days	8,342,000 Employee-Hours
ORNL	59 Days	2,111,135 Employee-Hours

question box. . .

If you have questions on company policy, write the editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

QUESTION: I was interested in a story recently in the **Nuclear Division News** concerning a deaf employee. Could a pilot program be set up in one of our installations where sign language might be taught?

ANSWER: The Nuclear Division's Affirmative Action Program to hire qualified handicapped applicants has resulted in a number of recent handicapped hires, including several deaf persons. In individual cases, colleagues of the deaf employees could either communicate with them satisfactorily or, in some instances, took various steps to improve their ability to do so. We have considered providing a sign language course for those involved with the deaf, but have decided that the current population of deaf employees does not warrant such a course at this time. We will reevaluate this need periodically as the deaf population increases.

Smoking on buses

QUESTION: On the buses at ORGDP there are "No Smoking" signs posted. Why is this not enforced and who is responsible for enforcement of no smoking on the buses?

ANSWER: Actually the "no smoking" signs are posted at this time in an effort to get people to cooperate. For the short distance that employees ride on the plant buses, we believe that they would and should refrain from smoking simply out of consideration for their co-workers who do not smoke.

Geese feeding

QUESTION: Last year one of the Canadian geese at ORGDP was killed

by a car on Contractor Road. They hang out in this area because they are fed there. Could they be fed elsewhere so as not to create this danger?

ANSWER: To the best of our knowledge, the Canadian geese are not being fed by plant employees. Since they do graze in and around the plant and occasionally walk across the roads, we all need to exercise caution with our vehicles. If the population continues to increase, some steps may be required to relocate some of the birds. Any such action would, of course, be handled through the appropriate wildlife agency.

Official telephone calls

QUESTION: We are constantly reminded that plant telephones are for official calls only. What is an official call?

ANSWER: An official call is one related directly to your work. Calls to the home to advise of unexpected work schedule changes may be considered official. Personal calls which are necessary may be made provided the cost, if any, resulting from such calls is billed to your residence telephone number, your personal credit card, or the call placed collect or from a pay telephone if one is available. In any event, all calls should be limited to the minimum time necessary to fulfill the purpose.

With the installation of the new telephone system in Oak Ridge, all calls there will be traceable. Abuses in use of the telephone system throughout the Nuclear Division will be investigated and corrective action taken in each case.



HANDICAPPED SURVEY—Paul Terry, right, director of the architectural barriers program for the Kentucky Easter Seal Society, visited the Paducah plant recently to speak on occupational barriers for the handicapped. He commended the plant for "taking positive steps toward equal consideration of the handicapped" by providing such accommodations as parking spaces, ramps, restroom adjustments and drinking fountain adjustments. He demonstrates an addition to a water fountain to Frank Shanklin, Paducah's Affirmative Action Coordinator.

New posts in Cascade Operations told at ORGDP



Waldo G. Golliher

Two personnel changes have been announced in the Cascade Operations Department at ORGDP. Waldo R. Golliher has assumed responsibility as Cascade Operations Department Superintendent replacing William D. McCluen. The latter has been assigned to work on special project assignments, particularly in studies of major near-term importance that will impact gaseous diffusion plant operations.

Golliher, a native of Harrisburg, Ill., received a BA degree in chemistry and a MS degree in physical chemistry from Southern Illinois University and also an MBA degree



William D. McCluen

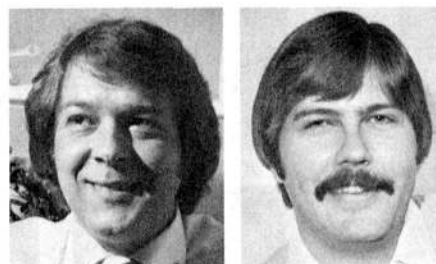
from Murray State University. He joined the Nuclear Division 27 years ago and transferred from Paducah to ORGDP in 1976.

Golliher and his wife, Jean, live at 9021 Shallowford Road, Knoxville. They have four sons, John, Steve, David and Jeffrey.

McCluen, who has a BS degree in engineering from the University of Tennessee, is a native of Cookeville. He has been with ORGDP for 33 years.

He and his wife, Lou, live at 343 Margrave Street, Harriman. They have two sons, Bill, who works in the converter shop at ORGDP, and Scott.

Three promotions listed at Y-12



Copeland

Lay



Strike

Three new dispatching supervisors have been named in Y-12's Product Engineering and Scheduling. They are Jesse C. Copeland, John W. Lay and Conrad S. Strike.

Copeland, a native of Valdosta, Ga., attended the University of Tennessee, both in Knoxville and Chattanooga. He joined Union Carbide in 1970 after working with Ralph Rogers Co. and Coullens Foreign Car Service.

He lives at Route 6, 120 Alabama Avenue, Clinton.

Lay, a native of Oneida, Tenn., has a BS in business administration from the University of Tennessee. He joined Union Carbide in 1977, after working with Highway Transport and serving four years in the Marine Corps.

Married to the former Deborah DeBusk, he lives at 9200 Corsairs

Drive, Knoxville. His father, John Lay, is in Y-12's Production Services.

Strike was born in Knoxville, and attended business college there. He joined Union Carbide in 1959 after working with the Tennessee Valley Authority.

He is married to the former Sue Galloway, and they live at 7525 Glastonbury Road, Karns. They have two children, Travis and Marta.

division death. . .



Mr. Kerr

Alexander R. Kerr, a designer in the Engineering Division at ORNL, died Wednesday, December 13. A resident of Oak Ridge, Mr. Kerr had been with Union Carbide for 21 years.

Survivors include his wife, Ruth, 165 North Seneca Road, Oak Ridge; and daughters, Cheryl Cooper and Janet Merritt.

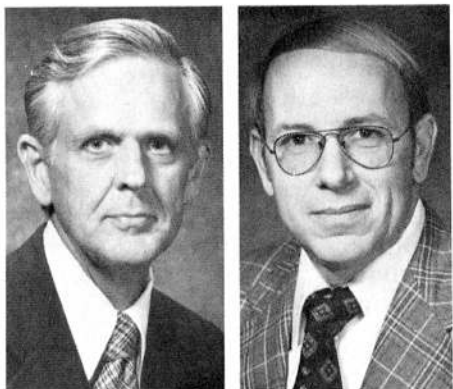
Burial was in Oak Ridge Memorial Park. The family has requested that memorials be made in the form of gifts to Child City's Endowment Fund, in care of C. A. Weiss, Secretary, Loyal Order of Moose, Mooseheart, Ill.

Christmas is for children . . .

Christmas without children would be like a day without sunshine. The Carbide Children's parties were held at the Oak Ridge High School for employees' offspring in Oak Ridge, and earlier in Paducah at the Arcade Theater. Rather than issue the scores of photographs made at both events, we chose at random from both locales bright faces to represent the joy and fun generated at the parties. From the cowboy from Paducah in the lower right to the Oak Ridge youngster intent on Santa Claus in the upper right, they all emphasize the fun it is to be young.



Mixon, Michel to Energy posts



Michel

Mixon

The appointments of William R. Mixon and John W. Michel as section heads in the Energy Division at ORNL have been announced by William Fulkerson, division director.

Mixon is head of the Energy Conservation Section, and Michel will head the newly established section on Efficiency Engineering.

Mixon succeeds Roger S. Carlsmith who was recently named director of the ORNL Energy Conservation Program. His new responsibilities will include oversight of the division's work on community systems, electric energy systems, and industrial, residential and commercial energy systems analysis.

Mixon first joined the ORNL staff in 1957. After serving for two years in the U. S. Air Force, he returned to ORNL and worked in the former Reactor Division until the Energy Division was formed in 1974. He received a bachelor's degree in chemical engineering from the University of Arkansas and his master's degree in engineering science from the University of Tennessee. He is also a graduate of the Oak Ridge School of Reactor Technology.

In 1973, Mixon began work in the Modular Integrated Utility System (MIUS) program and was named manager of that program and leader of the Energy Division's R&D management and community systems group in 1975.

He is a member of Sigma Xi, Tau Beta Pi and the International District Heating Association's Public Affairs Committee. He and his wife, Louise, live at 1018 West Outer Drive, Oak Ridge. They have two sons, Mike and Ric.

Michel has served as ORNL coordinator for geothermal energy research and manager of the Low-Temperature Heat Utilization Program since 1976. In addition to the low-temperature work, his new responsibilities will include projects carried out in the conservation technology group, the appliances program, and the National Annual Cycle Energy System (ACES) and Innovative Structures programs.

Michel joined the wartime Manhattan Project with the DuPont Company in 1944, after receiving a degree in chemical engineering from the University of Kansas. He subsequently worked on the project at the University of Chicago, and in 1945 began working at ORGDP. He is a graduate of the Oak Ridge School of Reactor Technology.

In 1959, Michel transferred to ORNL where he was involved in the analysis and development of several types of reactors. He also was a leader in ORNL studies of agro-industrial complexes and the use of process

heat from reactors. Michel served an 18-month assignment to the Australian Atomic Energy Commission and, in 1973, participated in an evaluation of a private enrichment venture conducted by Uranium Enrichment Associates. He was technical assistant to the ORNL associate director for advanced energy systems for two years.

New section formed in Fusion Energy



Sheffield

The formation of a new Experimental Confinement Section within ORNL's Fusion Energy Division has been announced by Division Director O. B. Morgan.

The new section, which will include all activities previously included in the High Beta Plasma and Tokamak Experimental Sections, will be headed by John Sheffield, who for the past year has been head of the Tokamak Experimental Section. R. A. Dandl, head of the High Beta Plasma Section, retired from ORNL in December.

Specific research areas to be incorporated in the Experimental Confinement Section include the ISX-B tokamak experiment and the EBT-S, the ELMO Bumpy Torus experiment that has been recently upgraded to demonstrate scaling principles. Dandl had pioneered and been the principal contributor to the EBT program.

The new section "will permit the maximum flexibility and effectiveness



John R. Sisk, M.D.

Dr. Sisk joins staff of Health Division

John R. Sisk, M.D., previously in private practice in Harriman, has accepted a position as a physician with the Health Division at ORNL effective January 1, announced A. Seaton Garrett, M.D., director of the Health Division.

in addressing exciting and challenging confinement programs with EBT-S and ISX-B," Morgan said in making the announcement.

John Sheffield came to Union Carbide in 1977 from the United Kingdom Atomic Energy Authority's Culham Laboratory in Oxfordshire, England, where he was a principal scientific officer. At Culham, Sheffield was responsible for injection heating in the Joint European Torus (JET).

A native of England, Sheffield received his BS degree from Imperial College, his MS degree from Northern Polytechnic in London and his PhD from the University of London. From 1966 until 1971, he was an assistant professor in the Center for Plasma Physics and Thermonuclear Research at the University of Texas.

Sheffield and his wife, Dace, live at 24 Mona Lane, Oak Ridge. They have two sons.

A native of Trenton, Tenn., Dr. Sisk attended Memphis State University for his premedical studies and graduated from the University of Tennessee's School of Medicine in 1950. He served his internship with the Lima Memorial Hospital, Lima, Ohio.

Since 1952 he has worked as a general practitioner in Harriman, and from 1961 to 1965 served a surgical residency with the University of Tennessee Memorial Hospital, Knoxville. For the last two years, Dr. Sisk has practiced general surgery in Harriman.

He is a member of the American Medical Association, American College of Surgeons and the Roane County and Tennessee Medical Associations. He passed his surgical board examinations in 1967.

Dr. Sisk and his wife, Betty, live at Walker Hill, Harriman. They have three children: Susan, John and Sarah.

Division death...



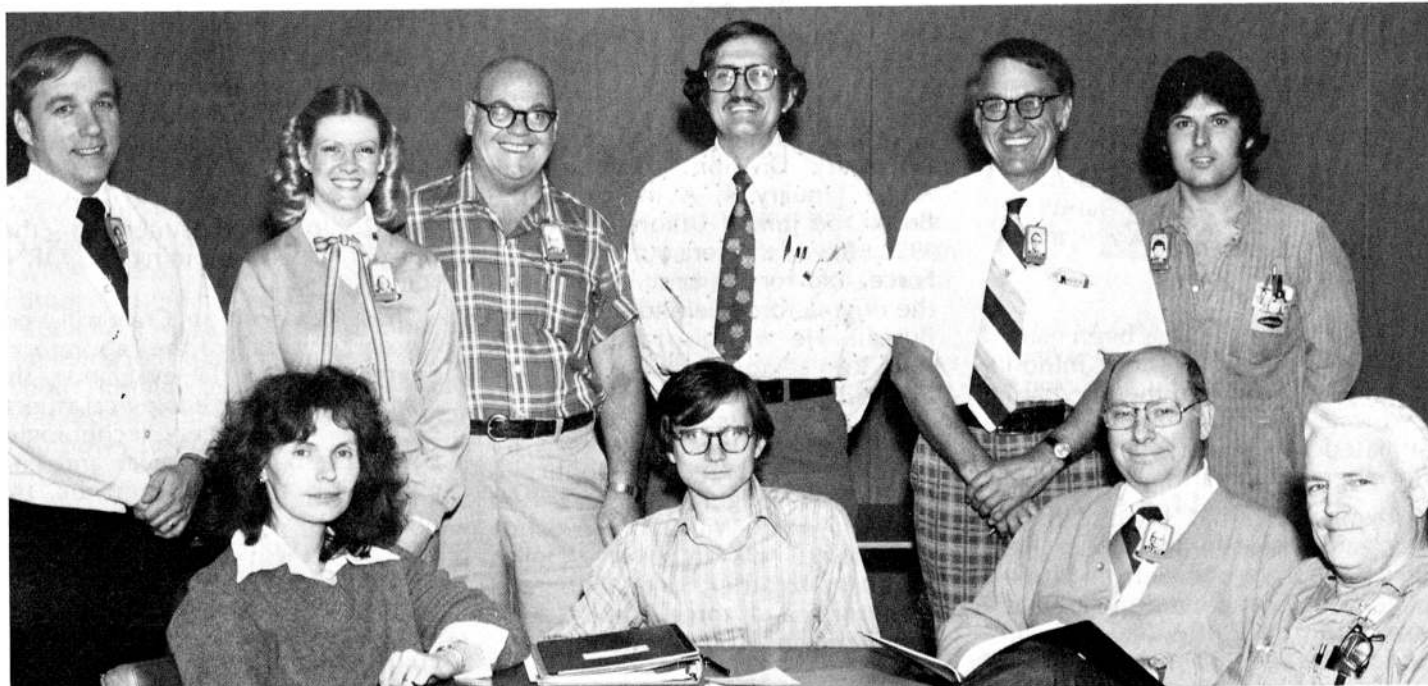
Mr. Wright

Hubert C. Wright, Purchasing Division, died January 3 at his 916 Carrington Road, Knoxville, home. A native of Kentucky, he was a graduate of the University of Kentucky.

Mr. Wright joined Union Carbide at the Paducah Plant in 1951, and transferred to Oak Ridge in 1962.

Survivors include his wife, Martha Maddux Wright; a son, David C. Wright; daughter, Marty Wright and a sister, Ruth Ellen Massey.

Services at interment were held in Salem, Ky. The family has requested that any memorials be made to the West Hills Baptist Church Memorial Fund, or to the Heart Fund.

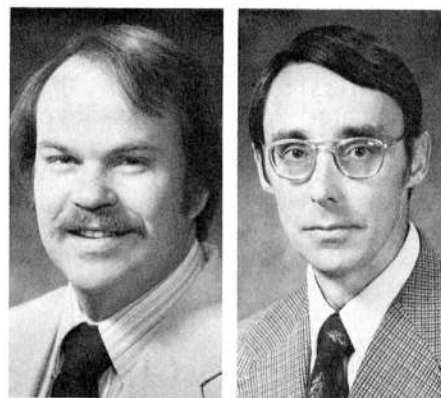


LOOKING AHEAD—The Paducah Plant's 1979 United Way committee met recently to organize efforts for next year's campaign. Plans were made to provide personal assistance to the area agencies and to maintain communications with the local UW boards to better understand individual needs. In the front row, from left, are Laura Johnson, Cascade Operations; John Dew, Technical Services; Ralph Fenton, Maintenance; and J. E. Kelly, Cascade Operations. In the back are W. E. Thompson, Cascade Operations; Anne Erwin, Employee Relations; J. H. Chesnut, OCAW local president, co-chairman; Ken Carpenter, plant chairman; Gene White, Finance and Materials; and John Mize, Maintenance. Absent were Shirley Shumpert, Power, Utilities and Chemicals; and J. O. Dobson, guard workers local president and co-chairman.



CHALKBOARD ARTIST—Engineering Division's Instrument and Electrical Engineering Department got into the spirit of winter last month when engineer Howard Cochran created this snowscape in colored chalk. Cochran has shown his paintings in Kingston, Oak Ridge and Knoxville; several are currently on display in Room K-106, Bldg. 4500 at ORNL. Admiring the scene are Janice Ramsey, left, a department draftsman; and secretary Jean Pickell.

Organizational changes announced in Environmental Sciences Division



Craig

Van Winkle

Several organizational changes in ORNL's Environmental Sciences Division have been announced by Stanley I. Auerbach, division director. Webb Van Winkle is head of the Aquatic Ecology Section; Robert B. Craig is manager of the Environmental Impacts Program; and Stephen G. Hildebrand and L. Dean Eyman have been named group leaders.

Van Winkle's responsibilities in the Aquatic Ecology Section include projects on the behavior of contaminants in ecosystems, ecological effects, ecosystem analysis and population studies. More than 40 researchers carry out an integrated program of field and laboratory investigations to determine how aquatic organisms respond to various types of stress resulting from energy production.

Van Winkle succeeds Robert W. Brocksen who will join the Electric Power Research Institute. Van Winkle received his bachelor's degree from Oberlin College and his doctorate degree in zoology from Rutgers State University. He was awarded postdoctoral fellowships by the National Science Foundation and was a Public Health Service postdoctoral fellow in biomathematics at North Carolina State University in 1970 and 1972.

Before joining the ORNL staff in 1972, Van Winkle was an assistant professor of biology at the College of William and Mary. He has been an adjunct professor at the University of Tennessee in Knoxville since 1977.

Craig has served as a group leader in the Environmental Impact Program since 1977. He received his BS and MS degrees in zoology and his doctorate degree in ecology from the University of California at Davis. He worked in the Zoology Department of that university before joining the ORNL staff in 1974.

In his new position, Craig will work closely with staff of the Laboratory's Energy Division in evaluating the environmental and ecological aspects of developing energy technologies such as geothermal, solar and coal conversion for DOE and on the nuclear fuel cycle for the Nuclear Regulatory Commission. In addition, his staff of about 25 persons will be involved in establishing environmental monitoring guidelines for energy facilities and evaluating environmental effects of energy supply strategies and legislation.

Hildebrand has been named a group leader in the Aquatic Ecology Section, with responsibility for the

initiation and development of the Division's activities in low-head hydroelectric technology.

Eyman is a task group leader in the Burial Ground Technology Program and will also be involved in work on coal conversion waste and other nonnuclear waste management activities in the Earth Sciences Section.

patent granted...

To O. Burl Cavin, David L. Clark, Reginald W. McCulloch and Chester S. Morgan, Jr., all of ORNL, for "Boron Nitride Insulating Material."

White to manage NRC safety project



White

James D. White, a research staff member in ORNL's Engineering Technology Division, has been named program manager for the Pressurized Water Reactor Blowdown Heat Transfer Program, division director Herbert E. Trammell has announced.

White has been head of experimental operations for the program since 1977.

The Blowdown Heat Transfer Program, the largest water reactor safety project at ORNL, is funded at \$4 million annually by the Nuclear Regulatory Commission (NRC) to study thermal hydraulic and heat transfer phenomena that could occur during a hypothetical loss of coolant accident in a nuclear reactor. Its principal experimental facility is the Thermal Hydraulic Test Facility, which incorporates a 49-rod electrically heated bundle to simulate part of a nuclear reactor core operating at up to 10 MW of power.

White will have overall responsibility for program administration, planning for the operation and analysis of experiments, and reporting experimental results to NRC.

A native of Greeneville, Tenn., White holds BS and MS degrees in nuclear engineering from the University of Tennessee. He joined Union Carbide in 1963 as a coop student in the Y-12 Plant's Development Division, and became a permanent staff member there after receiving his MS degree in 1968. In 1973, he transferred to ORNL's Reactor (now Engineering Technology) Division as a development engineer in the Heat Transfer Fluid Dynamics Section.

White is a member of Tau Beta Pi engineering honorary and the American Nuclear Society. He and his wife, Sue, have one daughter; they live at 113 Concord Road, Oak Ridge.

Two promoted at ORGDP



Carey

Thomas

Two promotions have been announced at ORGDP. Gerald A. Thomas has been named an engineer in the Separations Systems Division and Frank H. Carey has been named a supervisor in the Maintenance Division's Custodial Department.

Named manager for minority business program



Joyner

William D. Joyner has been named manager for small and minority business programs in the Purchasing Division. He was most recently affiliated with the human resources development department at ORGDP.

Joyner, who has been with the Nuclear Division for three years, has a BS degree in agronomy from Virginia State College and has done graduate work toward an MBA degree. Joyner of East Orange, N.J. served with the U.S. Army in various management positions during his military career.

He and his wife, Benita, live at 380 East Drive, Oak Ridge. They have three children, L'Tanya, Byron and Kent.

Thomas, a native Oak Ridger, received a BS degree in industrial technology from Tennessee Technological University. He has been with the Nuclear Division at ORGDP for four years.

Thomas and his wife, Sue, are the parents of two daughters, Rebecca and Leslie. The family lives at 210 W. Fairview Road, Oak Ridge.

Carey, who attended Hiwassee College, has been with ORGDP for three years. The Knoxville native and his wife, Jane, live at 109 Redbud Drive, Clinton.

division death...

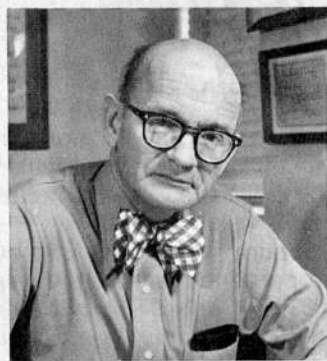


Mr. Goldberg

Gerald Goldberg, ORNL Analytical Chemistry Division, died in Oak Ridge January 4. A native of the Bronx, he joined Union Carbide in 1952. He was a veteran of the U.S. Air Force, and for the past 17 years was the driving force behind the Holiday Bureau. He was also active in the American Legion and the Oak Ridge Boys' Club.

Survivors include his wife, Mary McCulley Goldberg, 109 Monticello Road, Oak Ridge; daughters, Pam Panter, Donna Williams and Sandy Goldberg; his mother, Helen Goldberg; brother, Sam Goldberg; a grandson; and three stepchildren, Tim, Benji and Tommy Aldridge.

Funeral services were held at the Weatherford Chapel, with burial in Anderson Memorial Gardens. The family has asked that any memorials be in the form of contributions to the Holiday Bureau of Oak Ridge.



A decline in autopsies

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

The hospital autopsy rate is one of the best indicators of the quality of medical care being delivered. Shortly after World War II, almost every other patient who died in a general hospital received a careful postmortem examination. It was done to determine the precise cause of death and the presence and severity of known and unknown diseases at the time of death. Now only about two of ten are examined.

This decline is disturbing. With the cost of health care delivery skyrocketing, it is depressing to see one of the best quality control indexes declining steadily. In an article in the August 17, 1978, *New England Journal of Medicine*, Dr. William C. Roberts, pathologist at the National Heart, Lung and Blood Institute, reviewed this decline in autopsy rate, tried to explain it and offered some suggestions for its revival.

Surprises revealed

The relatives of the deceased should want an autopsy, because it is the only way to be certain that the total disease picture is known. Even when the cause of death seems obvious, surprises during the autopsy are relatively common. In a 1972 study of the accuracy of clinical diagnoses as measured by findings at the autopsy, 26 percent of all patients reviewed had undiagnosed cancer determined only by the autopsy, and in 45 percent of these, cancer was the underlying cause of death. This study was performed at Boston City Hospital, part of the Boston University School of Medicine, which probably has a far lower percentage of diagnostic "misses" than most hospitals.

The autopsy may be useful for determining insurance benefits. It may provide information on the presence of contagious or hereditary diseases that the family should know about. Sometimes it will help remove a feeling of guilt that a loved one may have contributed to the death.

Something to learn

A continuing review of autopsies is the best way a hospital has to measure the accuracy of clinical diagnoses and the appropriateness of medical and surgical treatments. A good physician wants his deceased patient examined so he can learn. If the mysteries and errors are buried, unresolved and unknown to anyone, no one benefits.

Generally speaking, the more competent a physician is, the more likely he is to request an autopsy.

One reason autopsies are declining may be that young physicians think their diagnostic tests performed before death told them all they needed to know. The physician also may lose interest in the case because there are often long delays in the completion of the microscopic studies and the final report is not completed for many weeks. A concern that some unsuspected disease found at the autopsy could increase the chance of a malpractice suit discourages many physicians, even though this is an extremely rare occurrence. A final reason for the decline is the unwillingness of the attending physician to "trouble" a bereaved family.

The pathologist, who should be the "conscience" of the physician community, appears to be less willing to come back to the hospital after 5 p.m. or on weekends. Autopsies are a hospital expense, and they do not contribute significantly to the income of the pathology department.

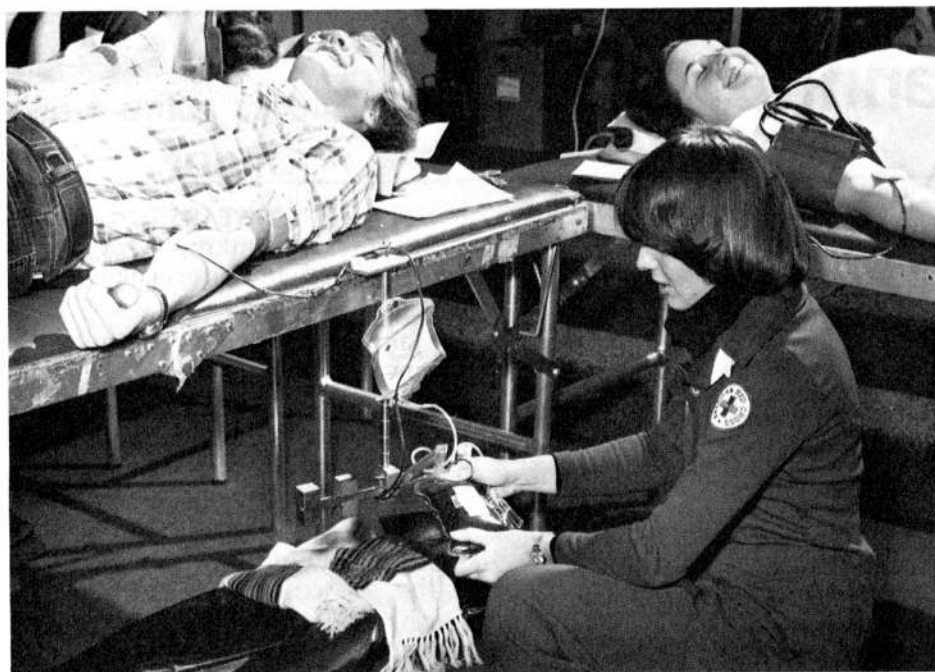
Several methods could be used to stimulate interest. The hospital assumes a cost of roughly \$1,000 for each autopsy. Hospitals recover this cost by increasing fees for other services. A more direct cost accounting system should be required, and third-party payment by insurance companies and Medicare-Medicaid should be allowed.

Valuable control device

Obtaining permission for autopsies should be made easier. In some Scandinavian countries, it is understood that all patients who die while in the hospital will receive an autopsy unless the family signs a document within 12 hours specifically denying it. It has been suggested that both hospitals and physicians should be required to maintain a minimum autopsy rate to remain accredited or licensed.

If all the above arguments have fallen on deaf ears, an additional one should help convince the reluctant. Autopsies are the principal source of organs (kidney, heart and blood vessels) and tissues (cornea and skin) for transplantation and extracts (growth hormone), all for the obvious benefit of the living.

The autopsy is a valuable quality control device for the practice of medicine and needs to be supported by more physicians and lay persons.



Busy scene at Y-12 blood drive

Red Cross drive nets 521 units of blood in Y-12

"We gave at the office," is the word from Y-12. In the successful blood drive last week a total of 521 units of life-saving blood was collected.

Of this, 277 were first time donors! Bill Mee, who acted as chairman for the drive, praised his divisional representatives in the plant who helped coordinate schedules. "Nearly 800 people volunteered to give. It was a shame we couldn't take them all," he said.

Sniffles and other ailments caused more than 100 donors to be turned away.

With the drive held by the Red Cross in Y-12, all Oak Ridge employees are now covered for blood needs, including members of their families. Paducah employees have been participating in Red Cross drives more than two years.

A total of 507 units was taken at ORGDP in October, and 474 at ORNL earlier last fall. Plant visits assure an



Blood pressure check

ample supply of blood at centers so that the need will be filled when it is required by patients in area hospitals.

The drive, the first held in Y-12, took place in the conference room of 9711-5. More than 300 donors volunteered each day to share their blood with someone else.

wanted...

ORNL

ONE or TWO CAR POOL MEMBERS from Powell, vicinity of Irwin Road and Beaver Creek Drive, to East Portal, 8-4:30. Eugene Lamb, plant phone 4-7115, home phone 947-6037.

RIDE or JOIN CAR POOL from Inskip area, Knoxville, 8-4:30. Susan Hall, plant phone 4-7427, home phone 687-8061.

JOIN CAR POOL from Eblen Estates in Kingston to East Portal, either shift. Lucille Kuykendall, plant phone 4-6055, home phone 376-3600.

RIDE or JOIN CAR POOL from Ebenezer Road, Knoxville, to West Portal, straight days. Jenny Forte, plant phone 4-7332, home phone 690-8257.

PGDP

Three additional members in carpool in vicinity of Clark School, Paducah, day shift. Drive in rotation. Jim Sinquefield, 443-1842, or Martha Burgess, 443-6603.

ORGDP

RIDE from Villanova Road in Oak Ridge, to Portal 8, 8:00 to 4:30. Sharon Leming, plant phone 4-9341, home phone 482-5741.

RIDE from Ball Road in Knoxville, to Portal 5, "D" Shift. Jack McKinney, plant phone 4-1301, home phone 690-1888.

JOIN CAR POOL or RIDE from Walker Springs Apartments in West Knoxville, to Portal 2, 7:45-4:15. Mike Elmore, plant phone 4-9221, home phone 690-8356.

Y-12 PLANT

CAR POOL member wanted from Papermill, Middlebrook Pike area, Knoxville, to any portal, straight days. Vicki Gasaway, plant extension 4-2123, home phone Knoxville 584-5276.

JOIN CAR POOL from Glenn Circle, Claxton, to Bear Creek Portal, H Shift. Violet Chabot, extension 4-3491, home phone Claxton 945-1185.

anniversaries

35 YEARS



Freels Gable



Jordan Lowry

R. D. Freels, Y-12's Utilities Administration, joined the Manhattan Project December 20, 1943. He lives at Route 1, Sunbright.

Alydean W. Gable's company service began December 18, 1943. She works in Y-12 Plant Laboratory and lives at 833 North Gateway Avenue, Rockwood.

Robert G. Jordan, manager of the Nuclear Division's Office of Safety and Environmental Protection, joined Union Carbide December 13, 1944. He lives at 129 Greystone Drive, Oak Ridge.

Company service for **William L. Lowry Jr.** began December 20, 1943. He works in Y-12's Dimensional Inspection and lives at 7816 Luxmore Drive, Knoxville.

(Editor's Note: Due to the increased number of those observing 35 year anniversaries, photographs will not be used in the future.)

ORNL

35 YEARS

George J. Fisher, Chemical Technology; Willie C. Schuiten, Operations; and Raymond W. Stoughton, Chemistry.

30 YEARS

Sidney Katz, Chemical Technology; Mack E. Lackey, Engineering Technology; and Louis Wickham, Biology.

25 YEARS

Howard E. Cochran, Ruth N. Hengstler, Morris F. Osborne, Jessie Inman, James A. Yount, William T. Henry, Jr., Hugh M. Long, Stanley W. Denny and Willard M. Collins.

20 YEARS

Robert L. Ferguson, John C. Poole, Claude M. Benge, Eugene A. Lewis, Bruce E. Wilson, Albert W. Herrell, Lonnie L. Anderson and James C. Kelley.

ORGDP

35 YEARS

Samuel Blumkin, Operations Analysis; Edwin Carter, Engineering.

30 YEARS

James Gregory, Engineering; Francis Manning, Security.

25 YEARS

Ray Allison, Earnest Boyd, James Liafsha, James McClane.

20 YEARS

Robert Dinwiddie, Gale Helton, Jason Lewis.

Y-12 PLANT

35 YEARS

Harold M. Payne, Materials Testing Support; Raymond E. Mollon, Buildings, Grounds and Maintenance Shops; Leonard R. Bledsoe, Research Services; Thomas H. Miller, Graphite Shop; Elizabeth Patrick, Plant Laboratory; James F. Baker, Buildings, Grounds and Maintenance Shops; and Jacob F. Mannes Schmidt, Beta-2 Expansion Assembly.

30 YEARS

Thomas G. Pappas, 9215 Rolling Mill; and Martha P. McKinstry, Materials and Services Division.

25 YEARS

George E. Duncan, Shirley H. Franks, James W. Kyle, Howard W. Roberts, J. T. Taylor, Fred H. Wray, Willis F. Miller, Clarence F. Needham Jr., Herman R. Parks, Chester Powers, Nolan Parrott, Leevie C. Vann, James L. Garner, William T. Chapman, William S. Helms, Charles H. Slaton, and Grady G. Norton. (Charles G. Wilson, November 30, 1953.)

20 YEARS

Billy J. Cooper, David T. Sissom, James F. McDonald, Jerry B. Davis and Amon P. Murphy.

PGDP

25 YEARS

Spencer E. Titus.

Social Security tax, base increased again and again!

It's up, up and away...again for Social Security (FICA) taxes. For the first pay period of 1979 taxes will increase from the present 6.05 percent of earnings up to a maximum of \$17,700 to 6.13 percent on a \$22,900 base. The maximum tax goes from \$1,070.85 to \$1,403.77, an increase of \$332.92.

The 1979 changes mark the 22nd change in taxes since Social Security started in 1937. The rate has gone through 14 changes, include the addition of Medicare in 1966, while the wage base has been increased 13 times.

If you earn \$22,900 or more this year, you will pay a total of \$1,403.77 in FICA taxes for the year. No income above that is taxed.

Social Security taxes have climbed from one percent on a taxable wage base of \$3,000 when the plan first began, to the present 6.13 percent on a wage base of \$22,900. And fiscal budget predictions are that it is just beginning!

The accompanying table shows the history of changes. Note that the tax rate from 1966 to the present includes both FICA tax and Medicare tax rate. The figures are combined to save space.

CHANGES IN SOCIAL SECURITY TAXES THROUGH 1979

Year	Tax Rate	Wage Base	Employee Tax	Employer Tax	Total Tax
1937-49	1.0%	\$ 3,000	\$ 30.00	\$ 30.00	\$ 60.00
1950	1.5%	3,000	45.00	45.00	90.00
1951-53	1.5%	3,600	54.00	54.00	108.00
1954	2.0%	3,600	72.00	72.00	144.00
1955-56	2.0%	4,200	84.00	84.00	168.00
1957-58	2.25%	4,200	94.50	94.50	189.00
1959	2.5%	4,800	120.00	120.00	240.00
1960-61	3.0%	4,800	144.00	144.00	288.00
1962	3.125%	4,800	150.00	150.00	300.00
1963-65	3.625%	4,800	174.00	174.00	348.00
1966	4.2%	6,600	277.20	277.20	554.40
1967	4.4%	6,600	290.40	290.40	580.80
1968	4.4%	7,800	343.20	343.20	686.40
1969-70	4.8%	7,800	374.40	374.40	748.80
1971	5.2%	7,800	405.60	405.60	811.20
1972	5.2%	9,000	468.00	468.00	936.00
1973	5.85%	10,800	631.80	631.80	1,263.60
1974	5.85%	13,200	772.20	772.20	1,544.40
1975	5.85%	14,100	824.85	824.85	1,649.70
1976	5.85%	15,300	895.05	895.05	1,790.10
1977	5.85%	16,500	965.25	965.25	1,930.50
1978	6.05%	17,700	1,070.85	1,070.85	2,141.70
1979	6.13%	22,900	1,403.77	1,403.77	2,807.54

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